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BOOK of ABSTRACTS

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P52. Dog babesiosis at Belgrade area: retrospective analysis of registrate clinical cases at last ten years

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Babesiosis is a tick-borne disease of dogs caused by protozoan parasite belonging to genus *Babesia*. In Serbia the presence of *Babesia canis* and *B.gibsoni* has been recorded in past decades. Spread of babesiosis in dogs in Belgrade area has been continuously examined since 1997. In this paper we present the results of prevalence for babesiosis in dogs in the period 2010-2019.

In total 3085 dogs' blood samples with clinical signs of babesiosis (anemia, haemoglobinuria, fever, pale of mucous membranes etc.) or infested with ticks were examined. We used capillary blood for examination, blood films were air-dried, fixed in absolute methanol (>99.8%) for 1 minute and stained with 10% Giemsa stain for 20-30 minutes. *Babesia* species were identified by morphometric characteristics.

The positive results were found in 36.69% (1132/3085) of suspected animals. Throughout years the following results were obtained: in 2010 babesiosis was established in 35.47%; in 2011in 36.26%; 2012 in 41.04%; 2013 in 33.74%; 2014 in 34.96%; in 2015 in 31.88%; in 2016 in 33,77%; 2017 in 41.71%; 2018 in 37.97% and in 2019 in 35.97%. Dominant *Babesia* species occurred during our examination was *B.canis* established in more than 95% of positive cases. The dynamics of occurrence of dog babesiosis was monitored from January to December. They showed that babesiosis occurs throughout the year in dogs. It was noted that the increase in incidence of dog babesiosis started in the interval March-April. May was the month of infection maximum, decreasing gradually until July. The autumn infection peak occurred in September and the lowest level in December.

The number of positive findings of *Babesia* spp. in dogs in period 2010-2019 was about the same level, with small deviations, within the investigated period. The appearance of babesiosis in dogs coincided with the seasonal dynamic of vector ticks especially *Rhipicephalus sanguieneus*, *Dermacentor reticulatus* and *D. marginatus.*

Keywords: babesiosis, dogs, Belgrade, ticks

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